

Typical Workflow for Digitizing VHS Tapes

Last updated 2024-07-18

Following is a typical workflow with suggested rates and times for digitizing approximately 200 hours (about 1 week 1 and a half days) of footage on VHS tapes with an external or internal capture device, with digitizing primarily being done by supervised and trained volunteers, and the digital collection hosted on the organization's own hosting platform.

Activity	Personnel	Rate	Time (in hours)	Dates
Cleaning and preparation of tapes for digitization	Curator/Project Manager		25	
Volunteer training	Curator/Project Manager	3 days	21	
Tape digitization	Volunteers/Contractor	Equivalent to runtime		
Quality control checks (may be concurrent with digitization)	Curator/Project Manager	Depends on method ¹		
Backup of received files and storage of physical tapes	Curator/Project Manager		10	
Training volunteers in creating metadata	Curator/Project Manager		14	
Ingest of digital collection to platform and metadata creation ²	Volunteers	Depends on platform		
Linking collection to website, publicising	Curator/Project Manager		10	

¹ Methods of quality control are dependent on time and resources. Ideally, someone would be surveying the footage during digitization in addition to full playthroughs afterwards to check for any capture errors. An efficient alternative would be to check each digital surrogate at regular intervals determined by the Project Manager (e.g., the first and last two minutes of each tape, and every five or ten minutes throughout).

² Metadata creation will take much longer if preparing full-text transcripts or timestamped descriptions.

General Considerations

- Considering the amount of time required to (1) preview material for selection and assess damage, (2) perform quality checks, and (3) actually digitize the material, the ratio of video runtime to labour is approximately 1:3 (e.g. 1 hour of footage will require about 3 hours of labour to digitize). See the Canadian Conservation Institute resource linked below for more details.
- Time estimates remain the same even when outsourcing digitization to a contractor. Vendor services may, however, include tape cleaning and quality control. Remember to allow preparation time for shipping and receiving.

Suggested Equipment & Digitization Standards	
Recommended Standards	
Federal Agencies Digital Guidelines Initiative (FADGI): Technical Guidelines for Digitizing Cultural Heritage Materials • See pages 21-23 for Master and Access file format guidelines • See pages 23-26 for Physical Environment (i.e. lighting) guidelines • See pages 27-74 for examples of specific material guidelines • See pages 76-110 for guidelines on equipment, workflow, quality control, and storage recommendations Canadian Conservation Institute - The Digitization of VHS Videotapes Digital Preservation Coalition - Digital Preservation Handbook California Audiovisual Preservation Project (CAVPP) - Target Audio and Video Specifications VTape - Best Practices Guide for Organizations: Caring for Video Art BAVC - QCTools, an open-source quality control application for digitized video	
Equipment by Type	How Equipment Meets Recommended Standards
Equipment and 3rd Party Digitization Services	
• Sony BVU-950 ¾" U-Matic VTR Editor • Sony SVO-1630 VHS Recorder • Sony AV-8650 ½" VTR EAIJ & Open Reel to Reel	Note: the listed equipment is for “playing” the analogue media and is part of the larger in-house digitization cycle described here in the Canadian Conservation Institute’s guidelines. This is not an exhaustive list; recommendation would

• Sony 3650 Amplifier	be to follow the Canadian Conservation's step by step guide linked above as some formats require more software than others and the connectivity of devices/equipment can be very specific.
VTape	3rd party service. Can digitize several analogue formats to fully uncompressed 10 bit Quicktime. Can clean analogue media.
Transfers to Digital	3rd party service. Flexible, local service that can digitize several analogue formats. Unclear on formats or cleaning services but seem very accommodating.
Scene Savers	3rd party service. American company, can digitize several analogue formats. Can clean analogue media. Can create to "format of your choice," including uncompressed digital files and MPEG 4 access files.
Processing Software	
Windows Movie Maker	Recommended by the Canadian Conservation Institute.
Pinnacle Studio Digitizer	Recommended by the Canadian Conservation Institute. Technically equipment that comes with software for capturing and editing digital video.
Physical Storage Media	
DVD-R	
BD-R	
Hard disk drive	
RAID systems	
LTO data tapes	
Flash media (SSDs or USB flash drives)	
Note: CD-Rs CANNOT be used. Low storage capacity.	

Temporary Digital Storage	
Amazon S3	
Google Drive	
Microsoft OneDrive	